

REMARKS/ARGUMENTS

In response to the Office Action mailed May 28, 2008, Applicants amend their application and request reconsideration. In this Amendment, claims 1-3 and 7 are cancelled and new claims 14-26 are added so that claims 4-6 and 8-26 are now pending.

Claims 9, 12, and 13 were rejected as indefinite. These rejections are respectfully traversed, and, in addition, the claims are amended, as appropriate, in response to the comments from the Examiner.

With respect to claim 9, the claim encompasses the embodiment of Figure 15 in which the second grating, instead of the ridges and valleys of other gratings, includes a surface that undulates, sinusoidally. As a result, the degree of phase shift imparted to a light beam passing through the second grating varies with position along the second grating, sinusoidally. See the description in the patent application concerning Embodiment 8 at pages 26 and 27. The claim has been amended for clarity and the rejection as to form is overcome.

Claim 12 encompasses the embodiment of Figure 8 and merely describes an amplitude grating in which the spatial distribution of light transmittance varies sinusoidally. In other words, the intensity of the light blocking material varies sinusoidally in inverse relationship to the transmittance. This grating does not include the conventional alternating light blocking and light transmitting areas. Thus, this first grating of claim 12 is somewhat analogous to the second grating of claim 9 in that what might be considered ridges and valleys are replaced by a gradually varying transmittance. See the description in the patent application with respect to Figure 8 at page 18, lines 19-30. Claim 12 has been amended to make this description clearer. While transmittance may be measured using a light source, it is a property of the materials of the grating so that a formality rejection based upon an absence of an energy source in the claim is not legally reasonable. Those of skill in the art recognize

that the grating characteristic described can be achieved at least by locally varying an internal property of or the thickness of the material of the first grating.

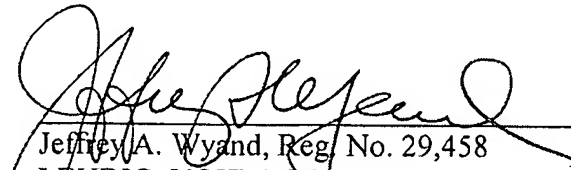
Applicants disagree that claim 13 was indefinite. However, the claim has been amended, consistent with the description in the patent application at page 34, lines 8-16. The basis of the rejection of the claim as indefinite is no longer present so that the rejection has been overcome.

Although a number of claims were rejected over prior art, claims 5, 6, 8, and 10 were merely objected to and not rejected. In this Amendment, those four claims have been rewritten in independent form, maintaining their original numbers. Therefore, those claims are now allowable. The remaining examined dependent claims and the new dependent claims are all derived from originally examined claims, clarified to the extent necessary to respond to the rejections as to form and to be consistent with the respective parent claims. Examined claim 4 is the basis of amended claim 4 and new claim 22. Likewise, amended claim 9 and new claims 14, 18, and 23 are derived from original claim 9. New claims 15, 19, and 24 are based on amended claim 11. Amended claim 12 and dependent claims 16, 20, and 25 are derived from examined claim 12. Finally, claim 13 has been amended for clarity and provides the basis for claims 17, 21, and 26.

Since the foregoing Amendment places the application in form for allowance, no discussion of the prior art rejections is necessary.

Reconsideration and allowance of all pending claims are earnestly solicited.

Respectfully submitted,


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JAW:yes